

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A high-resistance silicon wafer having resistivity of 100 Ωcm or more, wherein a carbon concentration is 5×10^{15} atoms/ cm^3 , and wherein an oxygen concentration is over 8×10^{17} atoms/ cm^3 (Old-ASTM).

Claim 2: (Canceled).

3. (Previously Presented) The high-resistance silicon wafer according to Claim 1, wherein a DZ (Denuded Zone) layer is formed at least 5 μm or more in depth from a surface of the wafer.

4. (Previously Presented) The high-resistance silicon wafer according to Claim 1, wherein a density of a LPD (Light Point Defect) having a size of 0.12 or more and observed on a surface of the wafer is controlled so as to be 02/ cm^2 or less.

5. (Previously Presented) An epitaxial wafer having a high-resistance silicon wafer according to Claim 1 as a base wafer.

6. (Previously Presented) An SOI having a high-resistance silicon wafer according to Claim 1 as a base wafer.

7. (Previously Presented) The SOI wafer according to Claim 6, which is a bonded wafer or SIMOX wafer.

8. (Currently Amended) A method of manufacturing a high-resistance silicon wafer, wherein a heat treatment which is effective in preventing an oxygen donor from being generated is performed on a silicon wafer having a resistivity of $100\ \Omega\text{cm}$ or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³, so that a remaining oxygen concentration is said wafer after the heat treatment is 6.5×10^{14} atoms/cm³ (Old-ASTM) or more.

Claim 9: (Canceled).

10. (Original) The method of manufacturing a high-resistance silicon wafer according to Claim 8, wherein the heat treatment is a high-temperature heat treatment at 1100°C or higher.

11. (Original) The method for manufacturing a high-resistance silicon wafer according to Claim 8, wherein the heat treatment is an oxygen out-diffusion treatment for forming a DZ (Denuated Zone) layer on a wafer surface.

12. (Previously Presented) The method of manufacturing a high-resistance silicon wafer according to Claim 11, wherein after the oxygen out-diffusion treatment a heat treatment for forming an oxygen precipitate nucleus, or the heat treatment for forming the oxygen precipitate nucleus and a heat treatment for growing an oxygen precipitate are performed.

13. (Original) The method of manufacturing a high-resistance silicon wafer according to Claim 8, wherein the heat treatment is high-temperature annealing treatment for eliminating a COP which is a void defect caused by a hole from a wafer surface.

14. (Currently Amended) A method of manufacturing an SOI wafer, comprising manufacturing an SIMOX type of SOI wafer that comprises a high-resistance silicon wafer having resistivity of 100 Ωcm or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³, and an oxygen concentration of over 8×10^{17} atoms/cm³ (Old-ASTM) as a base wafer.

15. (Original) The method of manufacturing the SOI wafer according to Claim 14, wherein the high-temperature heat treatment for forming a BOX layer in a SIMOX type of SOI wafer manufacturing process serves also as a heat treatment which is effective in preventing generation of an oxygen donor.

16. (Currently Amended) A method of manufacturing an SOI wafer, comprising manufacturing a bonded type of SOI wafer that comprises a high-resistance silicon wafer having resistivity of 100 Ωcm or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³, and an oxygen concentration of over 8×10^{17} atoms/cm³ (Old-ASTM) as a base wafer.

17. (Original) The method of manufacturing the SOI wafer according to Claim 16, wherein the high-temperature heat treatment performed in the bonded type of SOI wafer manufacturing process serves also as a heat treatment which is effective in preventing the generation of the oxygen donor.

SUPPORT FOR THE AMENDMENTS

Claim 1 has been amended to recite the subject matter of Claim 2, now canceled. Claims 14 and 16 have been amended to specify the same feature. Claim 8 has been amended to recite the subject matter of Claim 9, now canceled. In view of the foregoing, no new matter is believed to have been added to the present application by the amendments submitted above.